

## RESEARCH ON CORPORATE SOCIAL RESPONSIBILITY REPORTING

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### Abstract

The paper aims to revisit the relationship between reporting companies' characteristics and the importance assigned to social and environmental disclosure, using statistical correlations. We conducted a content analysis on the extent of sustainability reports of the largest 50 companies classified by Global Fortune in 2009, in order to address the research hypotheses. Results show that size characteristics measured by assets and revenues cannot be correlated to the extent of Corporate Social Responsibility reports published by companies, but there is a significant negative correlation between change in revenues and return on equity and social and environmental disclosure for the sampled companies.

**Keywords:** corporate social responsibility; social and environmental reporting; companies' characteristics; statistical correlations

**JEL Classification:** Q56

### Introduction

In the last years, the call for increased social responsibility, by governments, investors and corporations, was distinctive and urgent due to the global crises that took a central role. Financial market breakdowns, severe economic declines and food shortages required immediate responses. It seemed that climate change finally received due attention, with growing recognition of critical consequences without a significant change in the course. More and more entities are using corporate non-financial reporting, encompassing the social, environmental and economic impact of the company's operations, not just as an accountability tool but to drive strategy, unlocking new sources of revenue and growth. Companies are not turning to sustainability for altruistic reasons. Profitability and growth are at the heart of their reasons for building sustainability tools into their business strategy.

When people make decisions about the natural resources usage they must take into consideration the processes which are used to get these resources, and who has access to them. The next generations will still have enough resources and the environment will be left, as you know it today or even better in order to be normal living conditions? For these questions, the decision makers should find answers (Bodea, et al., 2010).

Even since the beginning of 2000's, the demand for disclosure of most important listed companies has dramatically increased and the failures of large companies listed on the most

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important stock exchanges have placed extra pressure on them and on standard setters for the increase in the quality of corporate reporting (Beretta and Bozzolan, 2004). During this period, most world companies reported a hard to manage financial environment and many business difficulties. A strong commitment to all areas of sustainability was generally reported, with the emphasis on the fact that sustainability is not a nice-to-have, but an essential component of doing business. Many companies also have board-committees that take responsibility for, and oversee, sustainability on the board's behalf. Most companies, furthermore, complied with a voluntary reporting framework and disclosed adequate adherence to the related principles.

As of 2008, there has been an increase in the quality and effectiveness of the social and environmental information reported. Mammatt, et al. (2010) assert that there are companies reporting a large volume of data (with a difficulty in identifying relevant information for stakeholders), but, also, companies reporting poor information (with a difficulty in commitment to sustainability).

The criticism about social and environmental reporting argues about the increasing of corporate social responsibility (CSR) and the limited amount of disclosures (Solomon and Lewis, 2002). In other cases some organizations that label themselves, as corporate social reporters do not behave in a responsible way concerning sustainability (Moneva, et al., 2006). It is also criticized that organizations often have good intentions in sustainability, but they cannot transform those intentions into actions and results.

Expectations about the responsible role of business in society are increasing and the recent research on corporate social responsibility discourse shows that there have been developments of a variety of instruments that aim to improve, evaluate and communicate socially responsible practices (Golob and Bartlett, 2007). We consider reporting an important communication tool, which can ensure greater corporate transparency and enable a better engagement with stakeholders. This is an exploratory study designed to investigate the extent and nature of social and environmental disclosure in corporate social reports.

The latest studies refer the recent accounting scandals that look different from the perspectives of the political/regulatory process and of the market regarding corporate governance and financial reporting (Ball, 2009). Although researchers referred to a wide range of theoretical perspectives, they have consistently speculated that larger, more profitable firms, and those in more socially and environmentally sensitive industries can be expected to make greater use of the (typically voluntary) disclosure of information about their social and environmental activities (Gray, et al., 2001). Almost all prior studies of environmental disclosure indicate that the extent of disclosure is significantly related to company's size (Cho and Patten, 2007; Patten, 1992, 2002). Their conclusion was that larger companies tend to disclose social and environmental information more extensive.

All these aspects support our study on investigating a number of hypotheses in order to establish if corporate attributes as size or profitability can explain a different extent in social and environmental reporting. Then, we discuss the results by reference to prior studies' conclusions. Our study contributes significantly to research in social and environmental disclosure by investigating the extent of CSR reports and the companies' size and profitability, results that may be used for designing a possible national reporting framework.

In order to respond the research questions regarding the sustainability reporting, we conducted content analyse on the extent of corporate social responsibility (CSR) report for the first 50 companies on Global Fortune. We, then, tested the correlation between independent variables regarding the size and the profitability of reporting companies and the extent of their CSR reports published for the year 2008 in order to confirm our research hypotheses. The paper is organized as follows. An overall introduction is completed by a synthesis of social and environmental researchers' results on corporate characteristics determinants regarding corporate social disclosure. Further, we explain the methodology, including the sample and data collection, the research techniques, and the research hypotheses. The next section refers to the main results of the content analysis and the correlation analysis. The final part summarizes the main findings of the study with a discussion of implications for future research.

### **1. Determinants of corporate social reports' extent**

In order to justify the statistical tests used, we next discuss the nature and potential impact of the main factors driving the disclosure of social and environmental information by companies.

Over the time, researchers had different points of view regarding corporate social and environmental disclosure, but one of the most important areas was to explain the correlation between social and environmental information and corporate characteristics: size, profitability and/or industry. A great number of studies have investigated the nature and frequency of corporate social responsibility disclosures, their patterns and trends, and their general relationships to corporate size and profitability. International comparisons indicate differences between countries and over time in the social and environmental disclosure area. Gray, et al. (2001) conducted a study that provides a review of the prior research which has explored the relationships between social and environmental disclosures and corporate characteristics and concluded that a substantial body of literature assert that social and environmental disclosures are an important phenomenon employed by corporations for a variety of purposes, from a wide spectrum of theoretical positions.

Increasing environmental performance became a more and more prominent requirement in all fields. Its accomplishment is made within the framework of changes promoted by governmental environmental policies and it is still featured by many uncertainties (Bran, et al., 2010).

#### **1.1 Company's size**

Economic efficiency, economic increase and stability are based on a certain culture and social development, on the resources' diversity and availability. In its turn, the environment depends on the size of economic activity and on the social development, as it is the case of the society quality resulted not only from the economic efficiency and stability, but also from the quality of the environment (Zaharia, et al., 2010).

An important number of prior studies in the social and environmental literature have investigated the extent of this type of disclosure in annual reports in relation to certain corporate characteristics such as size and industry and produced consistent results over

time. There are several studies, which had found a significant positive association between the size of the company and the extent of corporate social and environmental disclosure in the corporate annual report in both developed, and developing countries (Hossain, et al., 2006). Other researchers like (Roberts, 1992; Davey, 1982) found that the size of the company could not be significantly associated with the level of corporate social and environmental disclosure and its variability. Social and environmental disclosure studies use different measures of size available (total asset, number of employees, sales etc.). However, these three proxies for size are highly correlated (Hossain, et al., 2006).

Trotman and Bradley (1981) conclude that social and environmental disclosures can be explained by corporate turnover. Cowen, et al. (1987) find that the relationship only holds for certain areas of disclosure (typically environmental and community-based disclosures) whilst Chow and Wong-Boren (1987) make the distinction between mandatory and voluntary disclosure and find only voluntary disclosure to be explained by size. Thomas (1986) explored the hypothesis that certain disclosure and measurement practices in corporate reporting are contingent upon environmental uncertainty, technology and company's size. The findings showed that while the disclosure of forecast information is associated with environment homogeneity, certain measurement practices are primarily influenced by company's size.

Brammer and Pavelin (2006) found that larger, less indebted companies with a large number of shareholders are significantly more likely to make voluntary environmental disclosures, and that the quality of disclosures is positively associated with firm size and corporate environmental impact. Silva Monteiro and Aibar-Guzman (2009) revealed that, in spite of the fact that the level of environmental information disclosed during the period 2002-2004 is low, the extent of environmental disclosure has increased as well as the number of Portuguese companies that disclose environmental information. Moreover, the company's size and its listing on the stock market are positively related to the extent of environmental disclosure.

This evidence has received different interpretations depending on the theoretical framework adopted by the researcher (Hackston and Milne, 1996; Gray, et al., 2001). However, it could be argued that larger companies are subject to stronger pressure from stakeholders and, consequently, they are expected to find more persuasive arguments to disclose social and environmental information.

Accordingly, we tested whether there is a positive relationship between the extent of social and environmental information disclosed and the company's size, for the first 50 largest companies in the world, according to 2009 Global Fortune Classification in order to discuss the CSR reporting future tendencies and their connexion to financial and economic characteristics of disclosing companies.

## **1.2 Profitability**

Published empirical studies have not documented the existence of a consistent relationship between profitability and the level of environmental disclosures. The relationship between social and environmental disclosures and profit measures, if exists, proves to be vague. Some researchers found a positive association between profitability and the extent of corporate social and environmental disclosure (Bowman and Haire, 1976; Waddock and

Gravess, 1997) whereas others (Cowen et. al., 1987; Hackston and Milne, 1996) found no association between the variables. Belkaoui and Karpik (1989) showed a significantly pair-wise correlation, but with a negative regression coefficient for return on assets and corporate social and environmental disclosure.

Roberts (1992) found a positive relation between company's profitability (by using logarithm of profits) and corporate social and environmental disclosure, but, carefully concludes that a lagged relationship exists between these variables. Meanwhile, Patten (1992) fails to find any significant positive relationship between profitability and corporate social and environmental disclosure and Gray, et al. (2001) found a significant but weak association between profitability and environmental disclosure in the U.K.

Other papers studied the relation between environmental performance and environmental disclosure. Patten's (2002) study examines this relation for a sample of 131 US companies with regard to toxics release data from 1988 (made available in 1990). In contrast to the previous examinations, results indicate that there is a significant negative relation between performance and disclosure for the sampled companies. Cho, et al. (2009) assert that the language and verbal tone used in corporate environmental disclosures, in addition to their amount and thematic content, should be considered when investigating the relation between corporate disclosure and performance.

In an attempt to provide further evidence on this subject, we test whether the extent of environmental disclosure in CSR reports of the largest world companies is correlated to corporate profitability, in terms of return on assets and return on equity.

## **2. Methodology**

### **2.1 Sample and data collection**

Companies report on corporate social aspects either in separate sustainability reports, in a section of the annual report or both ways. While companies can communicate their CSR information using advertising, annual reports, public relations and their websites (Gray, et al., 1995), for this study it was decided to analyse the websites and the CSR reports, as regularly published document to comply with voluntarily requirements.

The study is based on a sample of companies included in 2009 Global Fortune Classification. From the sample of 50 companies, 44 corporate social reports were analysed for the reporting year 2008 and we calculated descriptive statistics in order to establish the independent variables distribution. We excluded six companies that have no CSR report published on their websites. All the 44 reports were downloaded from companies' websites. Using information given by Global Fortune website, we completed our database with the values of independent variables, such as: assets, revenues, percentage change on revenues related to previous reporting year, profit, and stockholders' equity for the year 2008. We collected this information for each company, added to our database and synthesized in thematic tables. The extent of CSR information reported by sample companies is measured in number of pages of corporate social responsibility reports.

## **2.2 Research hypotheses**

We organised our research in order to test the strength and the significance of the correlation between some corporate characteristics showing the size and the profitability (as independent variables) and the extent of social and environmental disclosure (as dependent variable) for the top 50 companies included in 2009 Global Fortune Classification, out of which we established our final sample of 33 companies that reported profit for the year and on these companies we tested the research hypotheses.

For measuring company size we used two absolute independent variables: total assets value and total revenue value, and a relative independent variable: changes in revenues for the last reporting year. The measures used were the value of total assets and total revenues expressed in US dollars, as disclosed on the Global Fortune Classification details. The explanation for using those figures is that we could ensure the comparability of the results.

The following specific hypotheses have been tested regarding company's size:

H1. Companies with greater total assets disclose social and environmental information largely than companies with fewer total assets.

H2. Companies with greater revenues disclose social and environmental information to a greater extent companies with lower revenues.

H3. Companies with higher change in revenues for the last reporting year disclose social and environmental information largely than companies with lower change in revenues.

Besides company's size, differences in the extent of social and environmental disclosure were also explained in accounting literature by profitability. However, the relationship between corporate financial performance and corporate social and environmental disclosure is arguably one of the most controversial issues yet to be solved (Choi, 1998). The advocates of this theory argue that there are additional costs associated with the social and environmental disclosure and, the profitability of the reporting company is depressed.

In the present study, profitability was measured in accounting terms computing both, the Return on Assets (ROA) and the Return on Equity (ROE) ratios. The measure of earnings used was the value of net profit, total assets and total owner's equity expressed in US dollars, as disclosed on the Global Fortune Classification details. An indicator of how profitable a company is relative to its total assets, ROA gives an idea about how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage. ROE, on the other hand, is a measure of a corporation's profitability that reveals how much profit a company generates with the money invested by shareholder.

The following specific hypotheses have been tested regarding profitability:

H4. Companies with higher rates of return on assets (ROA) disclose social and environmental information largely than companies with lower ROA.

H5. Companies with higher rates of return on equity (ROE) disclose social and environmental information largely than companies with lower ROE.

## 2.3 Research methods

### *Content analyse*

In order to develop some measure of social and environmental disclosure, we carried out a thorough content analysis of the corporate social responsibility (CSR) reports published by the companies of our sample for the year 2008. Content analysis is defined as a method of codifying text into different groups depending on selected criteria (Weber, 1990). This research method has been used extensively to investigate CSR reporting. We plead for the use of content analyse having in mind a conclusion of Milne and Adler (1999) which state that the research method most commonly used to assess social and environmental disclosures of a company is content analysis. In content analysis, several alternatives have been proposed in order to measure the amount of CSR reporting (Unerman, 2000). Gray et al. (1995) suggest that the extent of disclosures (number of words, sentences or pages) provides richer data and automatically encompasses the number of disclosures. Generally, studies measure the number of words (Deegan and Gordon, 1996; Zéghal and Ahmed, 1990), number of sentences (Hackston and Milne, 1996) or number of pages (Gray, et al., 1995; Patten, 1992) used to address the different CSR topics.

The extent of disclosure can be taken as an indication of the importance of a CSR topic to the reporting entity (Krippendorf, 1980). It seems now widely accepted that the number of pages is the preferred method for computing the amount of disclosure. Because it reflects the total space given to corporate issues, the importance attached to that theme can be contingent.

Therefore, considering the arguments in favour of the number of pages, but also the specific of our hypotheses, we decided to use this method for measuring the level of CSR disclosure and social and environmental performance.

### *Correlation analysis*

Along with overall analysis of social and environmental disclosure through CSR reports, our research investigates a number of hypotheses to determine whether the differences in reporting extent among companies can be related to company's size or profitability.

We used Pearson correlation as a measure of the strength of a relationship between two variables and tested their significance. It is widely used in the sciences as a measure of the strength of linear dependence between two variables. Pearson correlation coefficient is a measure of the linear correlation between two variables. In order to evaluate the correlation between two variables it is important to be known its strength but also its significance. The significance of the relationship is expressed in probability levels:  $p$ , that tells how unlikely a given correlation coefficient,  $r$ , will occur given no relationship in the population. A critical value is used in significance testing. It is the value that a statistic test must exceed in order for the null hypothesis to be rejected.

To find out if the two variables studied in each of the five hypotheses are related or not, we made the following statistical hypotheses:

$H_0$ : The two variables studied are not related.

$H_1$ : The two variables studied are related.

For practical determination of the correlations between variables analyzed in our study, we followed the steps: (1) calculate the correlation coefficient  $r$  associating data of independent variables and dependent variables; (2) calculate the number of freedom degrees: *the number of pairs of data minus 2*.

The coefficient of correlation can vary from positive one (indicating a perfect positive relationship), through zero (indicating the absence of a relationship), to negative one (indicating a perfect negative relationship). As a rule of thumb, correlation coefficients between 0 and 0.30 are considered weak, those between 0.30 and 0.70 are moderate and coefficients between 0.70 and 1 are considered high. Cohen (1988) has observed, however, that all such criteria are in some ways arbitrary and should not be observed too strictly. The interpretation of a correlation coefficient depends on the context and purposes. A correlation of 0.9 may be very low if one is verifying a physical law using high-quality instruments, but may be regarded as very high in the social sciences where there may be a greater contribution from complicating factors.

The analysis of correlation coefficients value obtained for our data refers to each hypothesis for the sub-samples chosen for statistical computation and then for the three geographical area (Europe, America and Asia). Having in mind Cohen classification, but, also, the arbitrary criteria for establishing such limits, we choose to test for significance level all coefficients higher than 0.2. For coefficients higher than 0.2 we apply Student test (t-test) in order to determine the significance of the correlation, using critical values of the Pearson Product-Moment Correlation Coefficient for different levels of significance.

The results interpretation is according to the following theoretical statements:

- If  $r$  is greater than the one of the critical values of the Pearson Correlation Coefficient, then the two variables are correlated with the respectively level of significance. In this case we reject the null hypothesis  $H_0$  and we accept the  $H_1$  hypothesis with that level of significance.
- If  $r$  obtained is less than all the critical values of the Pearson Correlation Coefficient, then the two variables are considered uncorrelated. In this case we support the null hypothesis,  $H_0$ .

### 3. Results and discussion

#### 3.1 Descriptive statistics

In order to establish our final sample for correlation analysis we provide descriptive statistics, separately for the 44 companies included that published CSR reports on their websites (Panel A) and for the 33 companies that reported profit for the year 2008 (Panel B). The Table 1 shows the minimum (Min), maximum (Max), mean, median, standard deviation and skewness values for company characteristics: company size represented by total assets (TASSETS), total revenues (TREV), the percentage of change in revenues (PERCHREV) from previous year, the profitability represented by two rates: return on assets (ROA) and return on equity (ROE) and the dependent variable: number of pages (NoP). For a symmetrical distribution of a group of numbers, mean and median measures of



central tendency are all the same. For a skewed distribution of a group of numbers, they can be different. Positive skewness indicates a distribution with an asymmetric tail extending toward more values that are positive. Negative skewness indicates a distribution with an asymmetric tail extending toward values that are more negative (Table 1).

**Table no. 1: Descriptive statistics**

<b>A. Descriptive statistics for the sample of 44 companies with CSR reports published on the webpage</b>						
<b>N = 44</b>	<b>TASSETS</b>	<b>TREV</b>	<b>PERCHREV</b>	<b>ROA</b>	<b>ROE</b>	<b>NoP</b>
Mean	686,114	164,053	13.1	2.7	-3.3	79
Median	223,190	128,206	11.8	1.6	9.5	66
Standard deviation	930,180	86,253	23.9	8.2	84.0	51
Max	3,452,975	458,361	124.7	19.8	91.6	194
Min	25,267	101,217	-29.3	-33.9	-518.1	19
Skew	1.60	2.25	1.98	-1.60	-5.11	0.88
<b>B. Descriptive statistics for the sample of 33 companies that reported profit in 2008</b>						
<b>N = 33</b>	<b>TASSETS</b>	<b>TREV</b>	<b>PERCHREV</b>	<b>ROA</b>	<b>ROE</b>	<b>NoP</b>
Mean	514,921	173,106	14.0	5.8	17.2	85
Median	190,304	129,134	12.1	3.9	14.0	74
Standard deviation	787,856	101,123	16.9	5.5	16.6	53
Max	2,885,016	458,361	51.3	19.8	91.6	194
Min	25,267	101,217	-20.8	0.1	0.8	19
Skew	2.13	1.92	-0.01	0.92	2.99	0.74

Descriptive statistics, presented in table no. 1, suggest differences between the sample of 44 companies and that of 33 profitable companies for each characteristic: revenues, assets, change in revenues, return on assets, and return on equity. Thus, these control variables are included as independent variables for hypothesis testing. Number of pages (NoP) of corporate social report is considered in our study the dependent variable.

An initial analysis of the data revealed that most of the independent variables were not normally distributed. Most of the independent variables are related to the size of the organization and consequently exhibit extremely large positive standard deviation. Total assets and total revenues were subjected to a natural logarithm transformation (LNASSETS, respectively LNREV) in order to test the study's hypotheses. Use of the raw values of the independent variables in a correlation analyse would give enormous influence to the information from a small number of very large companies. The logarithmic transformation reduces the influence on the regression results due to the very large companies. No such transformation of the social and environmental disclosure variables was required.

The main difference is that in panel B, most of the independent variables are positively skewed, suggesting that many of the sample's companies, the largest around the world, are also companies with significant social and environmental exposure. Therefore, we used correlation analysis in testing our hypotheses for the 33 profitable companies of our initial sample.

### 3.2 Discussion on correlation analysis results

Table no. 2 presents the values obtained after computing Pearson correlation coefficient in order to test all five hypotheses of the study, by total sample and by geographical region, as well as the level of significance for all coefficients higher than 0.2. Interpretation of results is given for each hypothesis.

**Table no. 2: Values of Pearson correlation coefficient and probability level for significance**

Pearson Correlation Coefficient	LNASSETS	LNREV	PERCHAREV	ROA	ROE	Freedom degrees
$r$ Europe	0.2838***	-0.3758***	<b>-0.5829*</b>	-0.3345***	-0.3415***	15
$r$ America	-0.2498***	0.0080	0.5236***	0.2140***	-0.1042	8
$r$ Asia	0.0497	-0.0026	-0.1422***	-0.1404	-0.2240***	4
Total sample	0.1956	-0.2238***	<b>-0.3474**</b>	-0.1853	<b>-0.3983**</b>	31

\*Correlation is significant at 0.02 level

\*\* Correlation is significant at 0.05 level

\*\*\* Correlation is significant at 0.1 level

H1: Companies with greater total assets disclose social and environmental information largely than do those firms with fewer total assets.

H1<sub>0</sub>: The two variables are independent.

H1<sub>1</sub>: The two variables are not independent.

The correlation coefficient computed is lower than 0.2, therefore null hypothesis is accepted and we conclude that there is no dependence between the value of companies assets and the extent of social and environmental reporting. Even if the modules of the coefficients for Europe and America are greater than 0.2, still no significance may be found between the two variables, as the coefficients do not reach any critical value, for the corresponding freedom degree.

H2: Companies with greater revenues disclose social and environmental information largely than do those firms with lower revenues.

H2<sub>0</sub>: The two variables are independent.

H2<sub>1</sub>: The two variables are not independent.

The correlation coefficient computed is slightly higher than 0.2, therefore it may be a weak dependence between the variables. By applying the *t-test* we found that *r* coefficient does not overcome any significant level. As shown in Table 2, the module of the coefficient for Europe is higher than 0.2, but for freedom degrees equal to 15, no significant could be found. Therefore, the null hypothesis is accepted and we conclude that there is no dependence between the value of companies' revenues and the extent of social and environmental reporting.

H3: Companies with greater change in revenues for the last reporting year disclose social and environmental information largely than do those firms with lower change in revenues.

H3<sub>0</sub>: The two variables are independent.

H3<sub>1</sub>: The two variables are not independent.

As shown in table no. 2, the study of correlation between the independent variable and the dependent one suggests a weak dependence between the two variables, but *t-test* shows that the module of *r*, equal to 0.3474, is greater than the critical value with a significant level of 0.05. That makes us reject the null hypothesis and to accept that the two variables are dependent, with a probability of 95%. Because the coefficient is below zero, we conclude that change in revenues for the last year is negative correlated with the extent of social and environmental information included in CSR Reports. For American companies, even if the coefficient is higher than 0.5, the *t-test* shows that there is no significance level reached for an error smaller than 10%.

H4. Companies with higher rates of return on assets (ROA) disclose social and environmental information largely than companies with lower ROA.

H4<sub>0</sub>: The two variables are independent.

H4<sub>1</sub>: The two variables are not independent.

The correlation coefficient computed is lower than 0.2, therefore null hypothesis is accepted and we conclude that there is no dependence between ROA and the extent of social and environmental reporting. Even if the modules of the coefficients for Europe and America are greater than 0.2, still no significance may be found between the two variables, as the coefficients do not reach any critical value, for the corresponding freedom degree.

H5. Companies with higher rates of return on equity (ROE) disclose social and environmental information largely than companies with lower ROE.

H5<sub>0</sub>: The two variables are independent.

H5<sub>1</sub>: The two variables are not independent.

The study of correlation between the independent variable ROE and the dependent one (NoP) suggests a weak dependence between the two variables, but *t-test* shows that the module of *r*, equal to 0.3983, is greater than the critical value with a significant level of 0.05. That makes us to reject the null hypothesis and to accept that the two variables are dependent, with an error margin of 0.05. Because the coefficient is below zero, we conclude that ROE is negative correlated with the extent of social and environmental information included in CSR Reports. For European and Asian companies, even if the coefficient is higher than 0.2, the *t-test* shows that there is no significant correlation between variables.

## Conclusion

For our study, we had in mind previous empirical evidence that provides mixed results on the relationship between reporting companies' characteristics and the importance they assign to social and environmental information disclosure. We tested any possible correlation for the sample of 33 profitable companies in 2008, selected from the top greatest companies as reported by Global Fortune 2009.

Summarizing, we assert that size characteristics measured by assets and revenue has a very weak correlation to the extent of CSR reports published by companies. This came in contrast with most of the prior studies. A possible explanation is that the credibility and the trust in very large companies are already assured by their goodwill, and the value-added by the disclosure of corporate social information cannot overcome their already high credibility. On the other hand, even it is negative and moderate, the correlation between change in revenues and the extent of social and environmental disclosure is 95% significant for the sample and 98% significant for companies in Europe.

In contrast to the previous examinations, results indicate that, there is a significant negative relation between profitability and social and environmental disclosure for the sample firms. Therefore, we assert that, on a short term, companies with higher change in revenues and with higher return on equity for one year tend either to give a smaller importance to social and environmental disclosure, or to have been reached a superior level of concision.

The main characteristic of these non-financial reports is their voluntary form and contents, which can lead the companies to use the reports to portray their image in a favourable light. There is some public pressure to develop CSR policies arising from the failure of voluntary reporting. These are the drivers for some governments, as well as other institutions, to introduce different accreditation principles, guidelines and standards for CSR practices and reporting, which do not attempt to mandate CSR reporting, but to find a middle way to hold companies accountable for their actions.

The results of our study are very useful for companies that intend to design their own sustainability framework and to acknowledge their social responsibility. Additionally, the geographical differences give us enough elements to support our future work, that of establishing main guidelines for a corporate social reporting framework considering the activity of subsidiaries of largest companies and the main trend for non-financial reporting nowadays.

The main limitation of our research is that the valuation method for the extent of social and environmental disclosure may be subject of a pro and cons debate. Ones (also our point of view) may consider that the extensive the report is, the greater importance is assigned for disclosure. Others may explain a less extensive report through the concise information.

In the current environment of confusion and uncertainty, corporate social reporting has much to contribute. Therefore, our further research is currently underway to propose a national conceptual framework that integrates reporting social and environmental information with financial information according to companies' industry and size. Restoring confidence and trust in markets will require a shift to long-term sustainable value creation, and corporate responsibility reporting must be an instrument towards this end.

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